

LET IT SHINE

2016 was the year solar panels finally became cheaper than fossil fuels. Just wait for 2017

Quartz, by Michael J. Coren, December 26, 2016



Flying high into 2017. (Solar Impulse)

The renewable energy future will arrive when installing new solar panels is cheaper than a comparable investment in coal, natural gas or other options. If you ask the World Economic Forum (WEF), the day has arrived.

Solar and wind is now the same price or cheaper than new fossil fuel capacity in more than 30 countries, the WEF reported in December (pdf). As prices for solar and wind power continue their precipitous fall, two-thirds of all nations will reach the point known as “grid parity” within a few years, even without subsidies. “Renewable energy has reached a tipping point,” Michael Drexler, who leads infrastructure and development investing at the WEF, said in a statement. “It is not only a commercially viable option, but an outright compelling investment opportunity with long-term, stable, inflation-protected returns.”

Those numbers are already translating into vast new acres of silicon and glass. In 2016, utilities added 9.5 gigawatts (GW) of photovoltaic capacity to the US grid, making solar the top fuel source for the first time in a calendar year, according to the US Energy Information Administration’s estimates. The US added about 125 solar panels every minute in 2016, about double the pace last year, reports the Solar Energy Industry Association.

The solar story is even more impressive after accounting for new distributed solar on homes and business (rather than just those built for utilities), which pushed the total installed capacity to 11.2 GW.

But global investment in renewable energy still lags far behind levels needed to avoid potentially catastrophic global warming, according to the United Nations. Global renewable investment last year was \$286 billion, or 25% of the \$1 trillion goal set by nations at the Paris climate change accord. Barriers to investment are mostly political rather than economic: Contracts are not standardized, regulatory uncertainty remains, and financial institutions have not created an asset class with a public, standardized track record that will reassure mainstream investors, reports the WEF (pdf, p 12).

But prices are eventually expected to win the day. Solar is projected to fall to half the price of electricity from coal or natural gas within a decade or two. That milestone has already been reached in some locales. In August, energy firm Solarpack contracted to sell solar electricity in Chile at just \$29.1 per megawatt hour, 58% below prices from a new natural gas plant.